

What is claimed is:

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C/ 1. An electronic imaging system comprising:  
a solid-state image sensor having a two  
dimensional array of pixels capable of converting  
light incident thereon to electric signal, the  
pixels being arranged in a plurality of horizontal  
lines, the lines being arranged vertically one under  
another; and

control means for selectively controlling a  
mode for sequential scan reading the whole pixels of  
the solid-state image sensor for still picture  
recording, and a mode for reading out pixel signals  
of  $k$  ( $k$  being a positive integer) vertically  
continuous lines of the solid-state image sensor for  
still picture recording or dynamic image processing.

2. The electronic imaging system as set in  
claim 1, in which the control means controls a mode  
of reading a plurality of  $k$  line blocks each of  $k$   
lines in the whole lines for still picture recording  
or dynamic image processing.

3. The electronic imaging system as set forth  
in claim 1 or 2, in which the control means reads  
out pixel signals concerning  $k$  lines and controls  
dynamic image processing of the read-out signals or  
using the dynamic image processed signal as AF, AE  
or AWB control data.

4. The electronic imaging system as set forth in claim 1 or 2, in which the control means reads out pixel signals concerning k lines and controls dynamic image processing of the read-out signals or using the dynamic processed signal as AF, AE or AWB control data, the AF, AE and AWB control data being calculated sequentially each in each frame.

5. An electronic imaging system comprising:  
a solid-state image sensor having a two dimensional array of pixels capable of converting light incident thereon to electric signal, the pixels being arranged in a plurality of horizontal lines, the lines being arranged vertically one under another; and

control, means for selectively controlling a mode for sequential scan reading out pixel signals concerning the whole pixels of the solid-state image sensor for still picture recording, and a mode for reading out pixel signals of n ( $n \geq 1$ , n being an integer) lines among every m ( $m \geq 3$ , m being an integer) vertically continuous lines in k ( $k \geq 6$ , k being an integer) continuous lines of the solid-state image sensor for still picture recording or dynamic image processing.

6. An electronic imaging system comprising:

a solid-state image sensor having a two dimensional array of pixels capable of converting light incident thereon to electric signal, the pixels being arranged in a plurality of horizontal lines, the lines being arranged vertically one under another; and

control, means for selectively controlling a mode for sequential scan reading out pixel signals concerning the whole pixels of the solid-state image sensor for still picture recording, a mode for reading out pixel signals of  $n$  ( $n \geq 1$ ,  $n$  being an integer) lines among every  $m$  ( $m \geq 3$ ,  $m$  being an integer) vertically continuous lines in  $k$  ( $k \geq 6$ ,  $k$  being an integer) continuous lines of the solid-state image sensor for still picture recording or dynamic image processing, and a mode for reading out pixel signals of  $n$  ( $n \geq 1$ ,  $n$  being an integer) lines among every  $m$  ( $m \geq 3$ ,  $m$  being an integer) vertically continuous lines of the solid-state image sensor for still picture recording or dynamic image processing.

7. The electronic imaging system as set in claim 6, in which the control means controls a mode of reading a plurality of  $k$  line blocks each of  $k$  lines in the whole lines for still picture recording or dynamic image processing.

8. The electronic imaging system as set forth in claim 5, 6 or 7, in which pixel data obtained by reading out pixel signals of n lines among every m vertically continuous lines for still picture recording or dynamic image processing, is such that its color signal is line sequential data.

9. The electronic imaging system as set forth in claim 5, 6 or 7, in which the solid-state image sensor has line sequential color filters.

10. The electronic imaging system as set forth in claim 5, 6 or 7, in which  $m = 2a + 1$  (a being a positive integer) and  $n = 1$ .

11. The electronic imaging system as set forth in claim 5, 6 or 7, in which signal having been dynamic image processed in either one of the modes noted above can be used for AF, AE or AWB control.

12. The electronic imaging system according to claim 5, 6 or 7, in which dynamic image processed signal obtained in either of the above modes is used as AF, AE or AWB control data, the AF, AE or AWB control data being calculated sequentially each in each frame.

13. The electronic imaging system as set forth

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in claim 6, in which the control means selects a mode for reading out pixel signals concerning n lines among m vertical continuous lines when obtaining dynamic image processed signal to be supplied to a display provided in it or an external display provided outside it or to be used as AE OR AF control data, and selects a mode of reading out pixel signals concerning n lines among m vertically continuous lines in k continuous lines when obtaining dynamic image processed signal to be used as AF or AE control data.

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14. An electronic imaging system comprising:  
a solid-state image sensor having a two-dimensional array of pixels capable of converting light incident thereon to electric signal, the pixels being arranged in a plurality of horizontal lines, the lines being arranged vertically one under another; and

control means for selectively controlling a mode for sequential scan reading out pixel signals concerning the whole pixels of the solid-state image sensor for still picture recording, and a mode for reading out pixel signal sums each of n ( $n \geq 2$ , n being an integer) lines among m ( $m \geq 3$ , m being an integer) in k ( $k \geq 6$ , k being an integer) continuous lines of the solid-state image sensor for still picture recording or dynamic image processing.



in claim 14, 15 or 16, in which image data obtained by reading out pixel signal sums each of n lines among m vertically continuous lines for still picture recording or dynamic image processing, is such that its color signal is line sequential data.

18. The electronic imaging system as set forth in claim 14, 15 or 16, in which the solid-state image sensor has a line sequential filter as color filter.

19. The electronic imaging system as set forth in claim 14, 15 or 16, in which the n lines for addition are constituted by the same color filter.

20. The electronic imaging system as set forth in claim 14, 15 or 16, in which the n addition lines are constituted by the same color filter, and different n line addition filters are provided for every m lines.

21. The electronic imaging system as set forth in claim 19, in which  $m = 2a + 1$  (a being a positive integer).

22. The electronic imaging system as set forth in claim 14, 15 or 16, in which dynamic image processed signal obtained in either of the above

modes is used for AF, AE or AWB control data.

23. The electronic imaging system as set forth in claim 14, 15 or 16, in which dynamic image processed signal obtained in either of the above modes is used as AF, AE or AWB control data, AF, AE and AWB control data being calculated sequentially each in each frame.

24. The electronic imaging system as set forth in claim 15, in which the control means selects a mode of reading out pixel signal sums each of n lines among m vertically continuous lines when obtaining dynamic image processed signal to be displayed on a display provided in it, to be supplied to an external display provided outside it or to be used as AE or AWB control data, and selects a mode of reading out pixel signals of n lines among every m vertically continuous lines in k continuous lines when obtaining dynamic image processed signal to be used as AF or AE control data.

25. An electronic imaging system comprising:  
a solid-state image sensor having a two-dimensional array of pixels capable of converting light incident thereon to electric signal, the pixels being arranged in a plurality of horizontal rows or lines, the lines being arranged



vertically one under another; and

control means for selectively controlling a mode for sequential scan reading out pixel signals concerning the whole pixels of the solid-state image sensor for still picture recording, and a mode for reading out pixel signal sums each of every  $q$  ( $q \geq 3$ ,  $q$  being an integer) vertically continuous lines in  $k$  ( $k \geq 6$ ,  $k$  being an integer) lines of the solid-state image sensor for still picture recording or dynamic image processing.

26. An electronic imaging system comprising:

a solid-state image sensor having a two-dimensional array of pixels capable of converting light incident thereon to electric signal, the pixels being arranged in a plurality of horizontal lines, the lines being arranged vertically one under another; and

control means for selectively controlling a mode for sequential scan reading out pixel signals concerning the whole pixels of the solid-state image sensor for still picture recording, a mode for reading out pixel signals of  $n$  ( $n \geq 1$ ,  $n$  being an integer) lines among  $m$  ( $m \geq 3$ ,  $m$  being an integer) vertically continuous lines of the solid-state image sensor for still picture recording or dynamic image processing, and a mode for reading out pixel signal sums each of  $q$  ( $q \geq 3$ ,  $q$  being an integer)

vertically continuous lines in  $k$  ( $k \geq 6$ ,  $k$  being an integer) lines of the solid-state image sensor for still picture recording or dynamic image processing.

27. An electronic imaging system comprising:  
a solid-state image sensor having a two-dimensional array of pixels capable of converting light incident thereon to electric signal, the pixels being arranged in a plurality of horizontal lines, the lines being arranged vertically one under another; and  
control means for selectively controlling a mode for sequential scan reading out pixel signals concerning the whole pixels of the solid-state image sensor for still picture recording, a mode for reading out pixel signal sums each of  $n$  ( $n \geq 2$ ,  $n$  being an integer) lines among  $m$  ( $m \geq 3$ ,  $m$  being an integer) vertically continuous lines of the solid-state image sensor for still picture recording or dynamic image processing, and a mode for reading out pixel signal sums each of  $q$  ( $q \geq 1$ ,  $q$  being an integer) lines in  $k$  ( $k \geq 6$ ,  $k$  being an integer) continuous lines of the solid-state image sensor for still picture recording or dynamic image processing.

28. The electronic imaging system as set forth in claim 25, 26 or 27, in which the control means has a mode of reading a plurality of  $k$  line blocks

for still picture recording or dynamic image processing.

29. The electronic imaging system as set forth in claim 26, 27 or 28, in which the solid-state image sensor has color filter constituted by line sequential filter.

30. The electronic imaging system as set forth in claim 27, in which the n addition lines are constituted by the same color filter.

31. The electronic imaging system as set forth in claim 27, in which the n addition lines are constituted by the same color filter, and different n line addition filters are provided for every m lines.

32. The electronic imaging system as set forth in claim 26, in which  $m = 2\alpha + 1$  ( $\alpha$  being a positive integer) and  $n = 1$ .

33. The electronic imaging system as set forth in claim 30, in which  $m = 2\alpha + 1$  ( $\alpha$  being a positive integer).

34. The electronic imaging system as set forth in claim 25, 26, 27 or 28, in which dynamic image

processed signal obtained in either of the above modes is used as AF, AE or AWB control data.

35. The electronic imaging system as set forth in claim 25, 26, 27 or 28, in which dynamic image processed signal obtained in either of the above modes is used as AF, AE or AWB control data, the AF, AE and AWB control data being calculated sequentially each in each frame.

36. An electronic imaging system as set forth in claim 26, in which the control means selects a mode for reading out pixel signals of  $n$  lines among  $m$  vertically continuous lines when obtaining dynamic image processed signal to be displayed on a display provided in it or an external display provided outside it, to be supplied thereto or to be used as AE or AE control data, and selects a mode of reading out pixel signal sums each of  $q$  vertically continuous lines in  $k$  continuous lines when obtaining dynamic image processed signal to be used as AF or AE control data.

37. The electronic imaging system as set forth in claim 27, in which the control means selects a mode pixel signal sums each of  $n$  lines among  $m$  vertically continuous lines when obtaining dynamic image processed signal to be displayed on a display

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1. The first step is to identify the problem. This involves understanding the situation and the goals that need to be achieved.